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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,109	11/21/2003	Noriyoshi Munenaga	12619-US-452	1108

31561 7590 04/19/2007
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER

MERCADO, JULIAN A

ART UNIT	PAPER NUMBER
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1745

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/707,109	MUNENAGA ET AL.	
	Examiner	Art Unit	
	Julian Mercado	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-14, 17, 19-22, 25 and 27-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-14, 17, 19-22, 25 and 27-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3-5-07, 3-01-07, 2-01-07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 21, 2007 has been entered.

Claims 12-14, 17, 19-22, 25 and 27-36 are pending.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on March 5, 2007, March 1, 2007 and February 1, 2007 have been considered by the examiner. The examiner notes that these IDS submissions cite the same documents; the duplicate citations filed after the first have been lined-through.

Claim Rejections - 35 USC § 112

The rejection of claims 20 and 28 under 35 U.S.C. 112, second paragraph has been withdrawn.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 12-14, 17, 19-22, 25 and 27-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 12, 21, 29 and 32 (the independent claims) recite the limitation “lapped integrally at a portion...” The examiner is unsure of what is meant by “lapped *integrally*”, other than the claims also reciting that the leads are *connected* to the electrode. (emphasis added) The specification has also been reviewed but is silent on the term “lapped integrally”, although the specification in, e.g. par. [0008] does disclose the following:

The aluminum foil portion of the positive electrode 12, which protrudes from one end of the power generating element 1, is *lapped* and then connected to the positive lead....

Thus, absent of additional clarification, the limitation “lapped integrally” is given its broadest reasonable interpretation and interpreted in a manner consistent with applicant’s use of the term “lapped”.

Claims 33 and 34 recite the limitation “wherein said [positive or negative] electrode is contacted each other directly at said end portion” in line 2 and lines 2-3, respectively. It is unclear what is meant by the term “contacted each other” insofar as what “each other” is in reference to, e.g. a plurality of similar electrodes, or that a single electrode is some form of contact with another structural member. The claims have been given its broadest reasonable interpretation notwithstanding the term “each other directly”.

Claims 35 and 36 are drawn to a “method for making a cell” in its preamble. The body of each claim, however, references prior claim 29 and 32 (respectively) which itself is drawn to a “power generating element”. Thus, the scope of claims 35 and 36 are unclear as the claimed “cell” and “power generating element” are not considered mutually distinct structures.

Claim Rejections - 35 USC § 102 and 103

The rejection of claim 29 under 35 U.S.C. 102(e) based on Ishida et al. (U.S. 2003/0134190 A1) has been withdrawn.

The rejection of claims 12-14, 21, 22, 25, 30 and 31 under 35 U.S.C. 102(b) based on Ikeda et al. (U.S. Pat. 4,604,333) has been withdrawn.

The rejection of claims 12, 13 and 17 under 35 U.S.C. 102(e) based on Romero (U.S. Pat. 6,730,431 B2) has been withdrawn.

The rejection of claims 19, 20, 27 and 28 under 35 U.S.C. 103(a) based on Ikeda et al. (U.S. Pat. 4,604,333) and Tamaki et al. (U.S. Pat. 5,418,083) has been withdrawn.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(new rejection)

Claims 12, 13, 29, 30 and 32-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Kita et al. (U.S. Pat. 5,849,431).

For claims 12, 29 and 32 and to the extent that claims 33-34 are understood for the reasons set forth under 35 U.S.C. 112, second paragraph (discussion above), Kita et al. teaches a cell comprising a wound type power generating element formed by winding a positive electrode [13], a negative electrode [14], and a separator [30], a core [31] around which said positive electrode, said negative electrode, and said separator are wound, and a plurality of leads [11] for taking current from said wound type power generating element fixed on said core and connected

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to the positive and negative electrodes. (also applies to claims 13, 14, 17, 22, 25, 30 and 31) See col. 5 lines 27-35 and col. 6 lines 57-65. To the extent that the claims are understood for the reasons set forth under 35 U.S.C. 112, second paragraph (discussion above), the electrodes are lapped, i.e. wrapped around end portions and along the axis of winding such that the leads [11] are fixed to the core [31], as shown in Figure 5.

(new rejection)

Claims 12, 13, 17, 25, 29, 30, 32-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Kozuki et al. (U.S. Pat. 6,156,452).

For independent claims 12, 29 and 32 and to the extent that claims 33-34 are understood for the reasons set forth under 35 U.S.C. 112, second paragraph (discussion above), Kozuki et al. teaches a cell comprising a wound type power generating element formed by winding a positive electrode [1], a negative electrode [2], and a separator [3], a core [16] around which said positive electrode, said negative electrode, and said separator are wound, and leads [5] and [6] which protrude out of the cell casing for taking current from said wound type power generating element are fixed on said core and connected to the positive and negative electrodes. (also applies to claims 13, 14, 17, 22, 25, 30 and 31) See col. 4 line 62 et seq., col. 8 lines 14-22 and lines 27-42. To the extent that the claims are understood and believed enabled for the reasons set forth under 35 U.S.C. 112, second paragraph (discussion above), the electrodes are lapped, i.e. wrapped around end portions and along the axis of winding, as shown in Figure 1.

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(new rejection)

Claims 12-14, 17, 21, 22, 25 and 29-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Tamura (JP 09-035701). For purposes of detailed discussion, the examiner relies on the machine translation of the abovesited document as obtained from the Japanese Patent Office website, <http://www.ipdl.inpit.go.jp/homepg_e.ipdl> For independent claims 12, 21, 29 and 32 and to the extent that claims 33-34 are understood for the reasons set forth under 35 U.S.C. 112, second paragraph (discussion above), Tamura teaches a cell comprising a wound type power generating element formed by winding a positive electrode, negative electrode and a separator around a rigid insulative core, i.e. mandril [2], around which said positive electrode, said negative electrode, and said separator are wound, and leads [10] and [12] which protrude out of the cell casing for taking current from said wound type power generating element are fixed on said core and connected to the positive and negative electrodes. (also applies to claims 13, 14, 17, 22, 25, 30 and 31) See the Abstract and pars. [0013] and [0024-0025], with emphasis on the portion of the disclosure stating that "conductive member 10 is connected to the forward electrode terminal of a cell 1... [and] conductive member 12 is connected to the negative electrode terminal of a cell 1." (ib.) Also note that the "core rod 2 made of an insulating material" as disclosed in the Abstract is the same structure as "the mandril 2 which insulation" as disclosed throughout the machine translation. (see, for example, par [0027]) To the extent that the claims are understood and believed enabled for the reasons set forth under 35 U.S.C. 112, second paragraph (discussion above), the electrodes are lapped, i.e. wrapped around end portions and along the axis of winding, as shown in Figure 4a.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19, 20, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Kozuki et al. (U.S. Pat. 6,156,452) or Tamura (JP 09-035701), in view of Tamaki et al. (U.S. Pat. 5,418,083).

The teachings of Kozuki et al. and Tamura are discussed above. The teachings of Tamaki et al., already of record, is repeated herein.

Kozuki et al. or Tamura do not explicitly teach a laminate film sheet for the case. However, Tamaki et al. teaches a laminate such as a sealing plate of insulating sheet material. See col. 3 line 42 et seq. This sheet is then adhered to a thermoplastic resin such as heat-shrink tubing [2] over the casing of a battery cell. See col. 3 line 17 et seq. Alternatively, adhesives such as epoxies and urethanes are further deemed readable on the claimed thermoplastic resin. The skilled artisan would find obvious to modify either of Kozuki et al.'s or Tamura's invention by employing a laminate film adhered to a thermoplastic resin, for reasons such as effecting a moisture-tight seal. See Tamaki et al. in col. 4 lines 37-41.

Response to Arguments

Applicant's arguments submitted with the present amendment have been considered but are moot in view of the new ground(s) of rejection.

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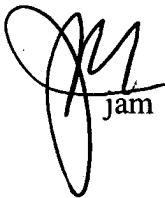
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



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